

WRINKLE PREVENTED THERMAL FIXING DEVICE AND IMAGE FORMING APPARATUS

BACKGROUND

[0001] The present invention relates to a thermal fixing device and an image forming apparatus including the thermal fixing device.

[0002] An image forming apparatus such as a laser printer is generally provided with a thermal fixing device including a heat roller and a pressure roller, and a toner transferred onto a sheet is thermally fixed during a period when the sheet passes between the heat roller and the pressure roller.

[0003] In such a thermal fixing device, there is known one in which in order to increase a contact area between a heat roller and a sheet and to achieve quick and certain fixation, plural pressure rollers are provided in a conveyance direction of the sheet.

[0004] However, when the plural pressure rollers are provided, as the contact area of the sheet with the heat roller is increased, a curved portion along the curvature of the heat roller is increased. Thus, there is a disadvantage that for example, in the case where an envelope formed of a double paper or the like is fixed, a shift in the amount of conveyance occurs between its front sheet coming in contact with the heat roller and its back sheet coming in contact with the pressure roller, and wrinkles are apt to occur.

[0005] Thus, for example, JP-A-5-006118 proposes that a nip width of each of the pressure rollers to a fixing roller is made 2.5 mm or less to prevent wrinkles from occurring when an envelope is fixed.

SUMMARY

[0006] However, even if the nip width of each of the pressure rollers is made 2.5 mm or less, this is insufficient to prevent the occurrence of wrinkles sufficiently.

[0007] One of objects of the invention is to provide a thermal fixing device that can prevent the occurrence of wrinkles of a fixation medium, and an image forming apparatus including the thermal fixing device.

[0008] In order to achieve the above object, according to a first aspect of the invention, there is provided a thermal fixing device including: a fixing member configured to be in contact with a fixation medium; a first pressing member disposed to face the fixing member and press the fixation medium to the fixing member; a second pressing member disposed to face the fixing member at a position downstream in a conveyance direction of the

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